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MAN IN THE PUBLIC SECTOR

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ABSTRACT

This paper addresses the question of how to model government behavior. The central thought is that in principle the same behavioral model should apply to the behavior of individuals in the private sector as well as the public sector. The paper starts, therefore, with an outline of the contours of a general model of individual behavior. Use is thereby made of the so-called interest function approach that I developed in *On the Interaction Between State and Private Sector* (Amsterdam: North-Holland, 1983) and which is somewhat further elaborated in this paper. The model is subsequently applied to the behavior of the individuals that makeup the government organization, bureaucrats and politicians. The potential importance of the approach is indicated by a short survey of the theoretical and empirical results obtained with it so far.

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*ut ea, quae ad hanc scientiam spectant, eadem
animi libertate, qua res mathematicas solemus,
inquirerem, sedulo curavi, humanas actiones non
ridere, non lugere, neque detestari, sed intelligere*¹

Spinoza

1. Public finance is one of the best starting points for the study of society and in particular, but not exclusively, of its political life: *"The spirit of a people, its cultural level, its social structure, the deeds its policy may prepare--all this and more is written in its fiscal history, stripped of all phrases. He who knows how to listen to the message here discerns the thunder of world history more clearly than anywhere else."* This claimed the great economist Joseph Schumpeter in 1918 in a study entitled *"The Crisis of the Tax State"* (originally in German).²

Two things are immediately clear from this opening: first, that crises in government finance have occurred before, and, second, that public finance is actually the most interesting subject in economics to do research on, when it comes

to it. I will not blame the reader who is not totally convinced of the latter point, but I am pretty sure that he or she will at least subscribe to the view that to have a good understanding of these factors that in reality determine government behavior is not only necessary for a satisfactory analysis of the problems that governments have to face, but also for comprehending the way an economy functions and for the development of economic policies that are attractive. In this respect one need not go as far as the economic historian North who is of the opinion that "the key margin of decision-making in the society today is access to government influence."³ The mere observation that, even disregarding all regulation, in many market economies the share of government expenditure approximates or even exceeds 50 percent of national income should suffice.⁴

The question then arises to what extent research in public finance has contributed to the development of a good apprehension of government behavior, the importance of which I just mentioned. My answer to this question would be that, notwithstanding its many achievements, its contribution is still quite small. But the signs are good. Public finance as a research area has witnessed an enormous development after the Second World War. While initially attention was almost exclusively focused on the theory of taxation,⁵ research has been extended into the direction of a full-fledged economic theory of the government, public or collective sector (these terms will be used interchangeably), on an equal footing with the economic theory of the private sector. To an important extent the theory of public goods, stimulated by the seminal work of Samuelson,⁶ has contributed to this change of content. But, in addition, a strong impetus was given by the rise of macro-economic theory and the concomitant extension and deepening of the theory of economic policy into a quantitative direction, pioneered by Tinbergen, and also Theil.⁷

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Because of that, attention gradually shifted from the traditional issue of taxation to the economic significance of government expenditure and the goods and services that go with it, causing the name public finance--although still widely used--to become more and more out of line with what it actually stands for.

I talked of a development in this direction of a full-fledged economic theory of the public sector. To my opinion this goal has not yet been achieved. And I do not mean with this that the theory is not yet finished, for this it will probably never be. What I mean is that an essential element is missing, and that is a satisfactory behavioral theory. It is still characteristic for the theory to deal with the question how governments *should* behave in order to attain stated ends instead of asking how they *actually* make their decisions, as determined by the behavior of the bureaucrats and politicians that make up these organizations. In that respect there has not been much of a change since the time that one of the greatest Dutch philosophers, Spinoza, lived. Around 1676 he wrote in a, alas uncompleted, treatise on the state that his colleagues did not take people as they are but as they wanted to see them, and that they, therefore, did not succeed in working out a useful theory of the State.⁸

But that is for now too negative. Especially during the last two decades or so there have been attempts from two different points of view--the one fitting within the Marxist and the other within the neoclassical tradition in economic theory--to change the situation.⁹ The second point of view--in the literature known as "public choice"--has up to now turned out to be the more successful, leading to numerous theoretical and empirical studies on political decision-making, incited by the work of pioneers like Buchanan, Downs, Olson and Tullock.¹⁰ It cannot be denied that one has succeeded here in developing a number of interesting

hypotheses concerning the behavior of political agents such as voters, parties, bureaucrats, and politicians.¹¹ Nevertheless, at least in my view, one has not been able to construct a general coherent theory, such that the behavior of the government organization can be satisfactorily studied--even in their own neoclassical terms--as part of the general economic process. Perhaps this is also the main reason why these studies cover less than 4 percent of the space of such well-known general textbooks on public finance as the ones by Boadway and Wildasin, and Musgrave and Musgrave.¹²

I will refrain here from going into the details of my argumentation.¹³ Instead, I prefer now to introduce to the reader an approach to the study of government behavior that I have been working on in cooperation with others. Although it is realized that "there are many approaches but few arrivals,"¹⁴ we think that this approach may bring nearer the theoretical coherence that is looked for. I begin with some remarks on human behavior in general.

2. Let me start with a fairly safe point of departure. I assume that individuals, for whatever reasons, take an interest in the possession of--or, to put it differently, have preferences with respect to--goods (including services) that can either be obtained through the market by paying a price or, otherwise, outside the market. Regarding the latter, attention will be restricted here to government provided goods. In order to obtain market goods an income is needed, which enables an individual to influence the flow of these goods, that is to exert an effective demand for them. Government provided goods, on the other hand, are obtained by influencing the political decision-making process. Through the use of political influence an effective demand for such goods is established. It should be noted, however, that due to the public (collective) character of some goods--think of defense--one need

not always have such influence at one's own disposal in order to be able to consume them. Now, before I go into the restrictions that individuals meet when trying to realize their interests, it seems appropriate to first take a closer view of these interests.

3. Given the limited means that individuals have at their disposal, their interests will generally conflict. The intensity of these conflicts will depend, however, on the extent to which they share each others interests. Let us consider then for what reasons this sharing may occur.

In the *first* place, although subject to serious controversy, it cannot be excluded that care for the interests of other people is *innate* (a genetic endowment). I would like to call this "altruism" if the interests of the other are naturally supported, and "jealousy" if the reverse case holds, that is if one is naturally inclined to act against the interests of the other.¹⁵ Employing, furthermore, the usual concept of a *utility function* to describe the relationship between the goods an individual has at its disposal and the welfare or utility it derives from them, altruism or jealousy implies that goods available to other people--as perceived by the individual--are an argument in its utility function, *irrespective* of the situation (circumstances) in which the individual finds itself. This is, of course, not the right place to deal extensively with the well-known "nature-nurture" problem that is involved here. The only point I want to make is that biologically determined other-directedness cannot *a priori* be excluded, and should at least theoretically be allowed for. It is to be noted, furthermore, that the implied fact that it should show up irrespective the individual's situation gives, in principle, at least an opportunity to detect its presence empirically. At any rate, it is important in view of the implications to

distinguish it analytically from the other forms of (acquired) other-directedness that will be explicitly considered below.

As a *second* reason why interests may be shared I mention *mobility*. I refer here to the possibility that individuals perceive a positive probability to arrive at the position of another individual. Such a probability may be not desired,¹⁶ as in the case of involuntary unemployment, but may also have to do with the fact that an individual voluntarily orientates itself on a potential transition to another position in the future, which can be considered as a form of what sociologists call "anticipatory socialization."¹⁷ In case of a positive probability it can be expected that individuals will pay heed to the interests of those already in the position concerned.

If people are distinguished by certain social characteristics--as is common in social research--and their position is determined in that way, the possibility arises that individuals in a particular position share the interests of individuals in other positions due to the fact that they simultaneously share these other positions; in which case they are said to occupy *multiple positions*. For example, one can distinguish between unemployed and capital-owners, but there are also unemployed shareholders. The image of the "homo sociologicus" with its different social positions and concomitant social roles is applicable here.¹⁸ This presents a *third* reason why interests can be shared. To give an example, our unemployed shareholder will not only be interested in government policies regarding unemployment benefits, but also--and at the same time--in policies with respect to profit taxation.

A property common to the reasons given so far is that individuals in a particular position "voluntarily"--that is, without being pressured to by other people (see below)--take account of, and support, the interests of individuals in other positions. For each position a utility function applies, which may be characterized

by altruism or jealousy. In case of mobility or multiple positions the welfare or utility of an individual can be thought to be determined by a weighted representation of the utility functions associated with the relevant positions. It stands to reason that the weights of the thus composed--*complex*--utility function will depend on the relative importance of the different positions. In case of mobility the probabilities related to these positions may serve to that purpose, while in case of multiple positions the relative contribution of the latter to the total control over goods by the individual present themselves as suitable candidates in that respect. Note, in comparison with altruism and jealousy as defined, that here the circumstances in which the individual finds itself--in terms of mobility and multiplicity of positions--are considered to determine whether the interests of other people are an argument in the former's (complex) utility function, which may consequently be expected to shape the individual's behavior. In principle at least, this aspect gives an opportunity to empirically sift out behavioral motives by studying behavior under different circumstances.

4. In trying to realize its interests, and thereby its welfare or utility, the individual encounters restrictions on the means that might be used to that end. These constraints may be related to attempts by others to influence the individual's behavior, but may also have an "impersonal" character, in the complementary sense of not being related to said attempts (behavior of people may play a role though; see below). In case of the former I will speak of *pressure*, and in case of the latter of *structural coercion*. For the sake of clarity, it is emphasized in this context that these concepts are not meant to evoke any non-neutral (i.e., pejorative) valuation. In view of our present subject--the enumeration of reasons why individuals care for other people's interests--I will first pay attention to an important aspect of

pressure. I refer here to the well-known phenomenon in psychology and sociology that intensive influencing of behavior, accompanied by rewards and punishments (positive and negative sanctions) may eventually lead to the result that people show the desired behavior *as if* voluntarily. In this way behavioral norms--i.e., opinions about how one should behave--are produced and instilled (internalized), institutionalization of behavior takes place, and culture is developed and preserved. A clear example is the education of children by parents and teachers. But there are many other examples. In fact we have to do here with a very common phenomenon to which everyone, to a greater or lesser extent, contributes, at home, at work, or in other social surroundings. The way markets and organizations function is co-determined by them. Norms and institutions are capital goods subject to decay, the often fairly diffuse production process of which can be very labor intensive (as in case of the education of children), but also very capital intensive (think of the structuring of the relationships between the great powers in which armaments play an important role). Because of the scarce means involved and the significance of institutions, economists should not be satisfied with taking them simply as data--in so far as they are at all allowed for in economic studies. The recent interest in the subject shown by authors like Schotter, Taylor and Williamson should be welcomed therefore.¹⁹

In the present context it is important to observe that due to continuous pressure accompanied by sanctions, individuals may behave *as if* they voluntarily serve the interests of other people. While making their decisions they simultaneously take account of their own interests as well as--one might say--the *vested interests* of those other people. A *fourth* reason has been found herewith why individuals, albeit not voluntarily this time, pay heed to other people's interests. Also in this case, the welfare or utility of the individual subject to pressure can be thought to

be determined by a weighted representation of the utility functions involved, where the weights this time reflect the extent to which other people succeed in getting their interests vested with the individual. Unless there is sufficient reinforcement ("investment") through the use of pressure, the weights will decay, as discussed above. Again in principle at least, this aspect may give an opportunity to empirically distinguish this behavioral motive for other-directedness from others.

5. A situation different from that in case of pressure is obtained with restrictions that are not due to influence attempts by other individuals, and in that sense have an impersonal character. Such restrictions were earlier subsumed under the heading of structural coercion. They can be of a technical kind--for example, for some people a day unfortunately only counts 24 hours--but may also originate with the behavior of other individuals and the expectations generated thereby. A nice example renders Becker's "rotten kid" theorem. This theorem learns that when a parent derives utility from the welfare of her or his children and transfers income to them because of that, even the most selfish child in the family may decide to act in a way that increases family income and thereby the welfare of the parent. The reason is that the "rotten kid" realizes that such behavior furthers its own interests because of the income transfers by its parent.²⁰ Contrary to what is the case with pressure, the interests of other people will now only be furthered if this benefits the individual's own--including vested--interests. They are not an argument in the complex utility function of the individual. The behavioral response is purely situation specific, which gives a clue for the empirical determination of this motive.

For the same reason, members of social groups (such as the unemployed or the self-employed), whenever they put pressure on the government, will focus on the interests of a representative individual in the group. Not necessarily because they

share or serve this individual's interests due to mobility or pressure, but because of the fact that in politics purely individual matters typically (corruption excluded) do not count. From the supply side--bureaucrats and politicians--as well as from the demand side, social groups are generally referred to where government policies are concerned. It is not surprising then that empirical research shows that voters do not have their vote so much determined by personal circumstances as by developments on the level of the social groups they refer to, and for which they hold politicians or political parties responsible.²¹

6. It is time for a brief *summary*. I have mentioned a number of reasons why the utility or welfare of an individual will depend on that of other individuals, causing other-directed behavior. Voluntarily, that is without being pressured to, one may be interested in the fortune of other people, because of: (a) innate altruism or jealousy; (b) the fact that one occupies multiple (social) positions; and (c) mobility, which means there is a chance of getting into another position. Apart from this it is possible that other-directedness is forced upon an individual by the use of pressure, which may accumulate to vested interests or norms causing the individual--as if voluntarily--to show the desired behavior. The individual will do this to a gradually lesser extent, if the decay to which vested interests and norms are subject is not sufficiently countered by new pressure. In the literature this is called "norm enforcement" or "norm sending."²²

On these grounds I came to the conclusion that the utility or welfare of an individual can be represented by a weighted average of the utility the individual supposes (representative) individuals to have in the social positions to which it refers--and which, therefore, determine its reference group--because of mobility, pressure, and its own specific or multiple positions. To each of the relevant

positions a utility function applies which may or may not be characterized by altruism or jealousy. The weights in the complex utility function thus obtained will thereby in case of multiple positions depend on the relative contribution of these positions to the individual's total control over goods, in case of mobility on the probabilities involved, and in case of pressure on the extent to which other people succeed in getting their interests vested with the individual. The level of welfare attainable by the individual will further depend on the structural coercion--the "impersonal" behavioral restrictions--that it meets. Here also the interests of other individuals may play an important role, as was discussed above for voters and political interest groups. In case of structural coercion these interests only have an instrumental function, however, in the sense that the individual will only refer to those concerned--that is, take account of them--in as much as it will further its own (including vested) interests. While discussing the different behavioral motives I have, furthermore, cursorily indicated the way empirical information on their impact can, in principle, be obtained.

7. Before I go into the significance of the foregoing for the study of government behavior, it seems useful first to indicate in more general terms some implications of the proposed point of view regarding human behavior.

-- In the first place I hope to have made it clear that the usual assumption in economic theory that individuals only strive after their own, selfish interests is a rather shallow conception of human behavior, which can only be fruitful as a very first approach under certain circumstances. That is, if this assumption is thus interpreted that individuals do not care at all for the interests of other people. For, amongst the five reasons given above why people would care there are four--to wit: multiple positions, mobility, pressure and structural coercion--that are in harmony

with a less limited conception of selfish behavior. It is only in case of altruism or jealousy that one really gets into trouble with this assumption. Personally, I do not expect much, however, of the empirical relevance of these last two motives, even though it cannot be excluded by the sheer lack of data that they are an important reason for other-directed behavior.²³

Although the assumption of selfish behavior, when literally interpreted, does not preclude a sophisticated view of human activity, it should be noticed that this wider conception is only encountered to a limited extent and in some subfields of economic theory (including public choice). As an example, the attempts to develop a positive theory of redistribution can be mentioned, where, among others, use is made of the mobility argument presented above.²⁴ Due to this motive people would favor income redistribution, because they run a chance of finding themselves in a lower income class one day.

-- This brings me to another interesting aspect of the wider conception of people's own interests. Although it may at face value seem to hold that the world would look much more equitable--in terms of equality of income--if everyone were an altruist, this need not always be the case. Reminding the reader of the fact that in case of altruism goods that are available to other individuals are an argument in the utility function of the altruistic individual, it will be clear that it depends on the specific character of this function to what extent, for example, the individual will be prepared to transfer income to those involved. It is not at all certain that income will be divided equally. On the other hand, it is a well-known result from the literature concerning insurance against risks that people who are risk-averse are prepared to pay a risk-premium ensuring that their income will be the same under all circumstances, irrespective the nature of their utility function or the amount of the premium.²⁵ For those dependent on transfers the presence of

mobility--that is, here, the presence of risk for the not yet dependent--may therefore lead to a higher income than would hold under altruism.

-- A third implication that I would like to focus attention upon concerns the determination of the character of the utility function of an individual. It was noticed before that the utility or welfare level of an individual is, on the one hand, determined by the utility the individual associates with the social positions to which it refers, and, on the other hand, by the "impersonal" behavioral restrictions (structural coercion) that it encounters. By making the usual assumption of utility maximization, the behavior of the individual would, in principle, be determined. The assumption boils down to assuming that individuals will follow their preference direction, as indicated by their utility function, until they are confronted with the barriers thrown up by structural coercion. In this way it is derived in the theory of consumer behavior, for example, what an individual will buy, given income and prices. But this does not exhaust the possibilities of application. Again in principle, it is also possible namely to follow the reverse procedure. Given the factual behavior of individuals and sufficient information with respect to the structural coercion that they face--in our example this would be information on income and prices--some knowledge can be acquired regarding the utility function representing their preferences. Through its behavior the individual reveals the importance it attaches to the control over particular goods. In economics this procedure is known as the method of revealed preference. This method is not only interesting in itself, but, I am afraid, also indispensable for the earlier indicated way to make predictions. Unfortunately, both ways are treacherous.²⁶ Even disregarding the problem that corrections have to be made for the effects of structural coercion, there is the additional problem that the utility function mentioned is in fact--given the validity of my earlier exposition--composed of

different utility functions which hold for (representative) individuals in particular social positions; people to which the individual refers because of mobility, pressure, or multiple positions. Only one such function is associated with the specific position in which the individual is observed. If one wants to derive the character of this function from the individual's behavior, it will, consequently, be necessary to correct for the effect of the other relevant utility functions. For, if my thinking is sound, it is to be expected, for example, that an individual will attain a higher utility or welfare level if the subjective probability of arriving at a position with a (perceived) higher welfare level increases, even though nothing changes with respect to the specific position in which the individual finds itself at that time. Under the influence of a changing environment its preferences and behavior will change.²⁷

-- There is one other point that I, finally, would like to go into in this context. It deals with the information that is necessary to explain and predict behavior. Although it is realized, of course, that in practice it can be extremely difficult--if not impossible--to disentangle all the various motives that are said to determine individual behavior, I have nevertheless ventured this excursion into an area that, as was earlier noted, is reminiscent of the longstanding, and touchy, "nature-nurture" debate in the social sciences, for mainly two reasons: first, because of the theoretical implications of the distinctions made which are in my view important for a better understanding of social phenomena, and thereby for the development of economic theory as a behavioral science, as I hope to have illustrated above; and, second, because of the fact that, even though the final answer on all our questions may never be obtained, this does not seem to preclude that at least some useful empirical light can be thrown on the said motives, the possibility of which I have already sketchily indicated while discussing them.

Let us once more take a look at the different factors involved. In general the most serious informational problems can be expected with the determination of the impact of altruism (or jealousy) and pressure. Information regarding multiple positions and mobility, even though perhaps not always available yet in a satisfactory way, can in principle be obtained, albeit that the nasty problem that only perceptions count will have to be surmounted. With pressure--vested interests--it is becoming a lot more difficult. Nevertheless, even in that case theoretical, especially game-theoretical, instruments exist that can be fruitfully applied--as I have tried to show elsewhere²⁸--provided that the source of pressure is identifiable and still active. For example, with respect to the vested interests accumulated by the pressure that parents and children, or a large company and a (local) government, exert on each other, a non-trivial analysis can be carried out, to my opinion. It is different with the more diffuse vested interests or behavioral norms that an individual has internalized under the pressure of its educators, which are not so much referring to particular persons as well as a "generalized other." The exact significance of them will be hard to determine. This is also the case, it seems, with altruism and jealousy. Have we thereby ended in a dead alley? I do not think so, even disregarding the factual importance of the aforementioned factors. For, although norms are subject to decay, as earlier noticed, they--and particularly last-mentioned factors--are generally of such a persistent (structural) nature that they will have a more or less constant influence over quite a long period. Changes in behavior can then be (largely) ascribed to changes in factors about which information can be obtained. Parenthetically, it is noted that laboratory experiments may prove to be an important auxiliary research tool here.²⁹

This concludes my short digression on individual behavior. It will form the theoretical basis for the sequel of this article, which deals with government

behavior. The central thought is that the same factors underlie the behavior of individuals in the public sector as in the private sector.

8. "Man in the public sector" is, apart from an intriguing title, an important theme. After all, our attitude with respect to this sector in the economy depends on our view of the way people in this sector behave. Is the supposition that governmental policies are always directed at the furtherance of the "commonweal" or "general interest," as our laws and also the usual (often implicit) assumption in economic theory suggest, or is one of the opinion, for example, that the state suppresses and laws are just a lie?

The students of law Algra and Janssen call the term general interest as such an empty box.³⁰ In their view, the general interest should be the result of a weighing process; different interests are balanced against each other and what presents itself as the primary interest may in that case be called the "general interest," they write.³¹ By using the word "should," they attach a normative interpretation to this. Arrow has shown, however, that in general--without restricting the preference domain of individuals, for example,--no such interest can be derived in a non-dictatorial way.³²

But, also a positive interpretation can be given of this substantiation of the concept. What is at stake then is to determine in which way the government *factually* takes account of the interests of individuals. For the explanation of government behavior only this conception of the term general interest is of concern. To arrive at the operationalization aimed at, I will use the thoughts on individual behavior developed above. The complex utility function of which I spoke, which is a weighted average of the utility functions of (representative) individuals in social positions to which the individual refers for reasons given before, this complex

utility function I would like to suggest as representing *the general interest as it is effective for the individual involved* (i.e., influences its behavior). The effective general interest is, consequently, likely to differ per individual,³³ as is the extent to which the individual can, and will, further this interest. A dictator has presumably more means available to realize her or his general interest than a slave. In my view, also, the general interest need not per se be constant for an individual. A change in reference group, due to taking a job in the public sector or because of being elected as a politician, for example, will also change the effective general interest of an individual. How exactly, one may ask? And, further: How will all these general interests of politicians, and bureaucrats, determine the general interest as reflected by the factual behavior of the government? These are the central questions I would like to deal with below. However, I should immediately temper your rising expectations somewhat by stressing that I can only sketch here the outlines of an answer. Space considerations alone force me to leave many important--such as international--aspects aside.

9. As point of departure, I take my earlier remark that in the political process interests on a purely individual level will generally have no impact for obvious reasons (think alone of the informational problems involved). Only the *effective--politically influential--interests of representative individuals of social groups* will play a role in the decision-making process of the government, in the form in which they are perceived by the decision-makers within that organization. Interests acquire effectiveness when they are "voluntarily" taken along in the decision-making process by agents within the government organization, or under pressure or because of structural coercion, as was earlier argued for individuals in general. The interests of the aforementioned representative individuals may be represented by a

complex utility function which reflects the utility functions of the individuals making up these social groups. Since it is a fictitious individual that is focused at, I prefer here the term *interest function* instead of utility function.

I agree, this sounds fairly complex. Nevertheless, the political landscape becomes, at least on first appearance, a lot more accessible now that we can concentrate on social groups instead of individuals. But it will be clear that even on this level of abstraction the analysis of government behavior will still be difficult because of the great variety of social groups that one can think of. I need only mention the many interest groups that are referred to in the media. In almost any governmental policy area they are encountered. We will have to lower our ambitions, therefore. This is possible by first redirecting our attention from the multiplicity of government policies to the total value of goods provided by the government outside the market and the taxes levied to that purpose. The interests of individuals can then be reduced--as a first approach--to an interest in disposable (after-tax) income for the purchase of market goods and a, as yet undifferentiated, interest in (non-marketed) government provided goods. The way income is acquired is subsequently the focal point for an explicit distinction between a number of economic positions upon which attention can further be focused at first instance. The institutional structure of the production process in a market economy is such that in that perspective *four elementary positions* or social classes can be distinguished: (1) government sector workers (bureaucrats and politicians), with an income out of taxes made possible by the government's monopoly of legitimate physical force;³⁴ (2) private sector workers, with a wage income; (3) capital owners, with an income out of profits in a wide sense; and (4) "dependents," with an income out of transfers, originating with the aforementioned incomes. This partitioning is not only of significance for gross (before-tax) income, but also for the level of

disposable income and the available amount of government provided goods. I mention in this context the unequal opportunities and means for individuals in the indicated positions to influence the supply of goods and the accompanying price-tag (taxes). While workers and capital owners can bring their command over the supply of, respectively, labor and capital into play, the "dependents" clearly occupy the weakest position here. One could further point at important differences between workers in the private sector and workers in the public sector, but I will refrain from this because of space limitations.³⁵ Illustrative of the fact that the distinctions are not only theoretically interesting are the, in the Dutch media (but also elsewhere), already for quite some time much belabored upon tensions among precisely these four social groups. This is also shown by the government's program and the disputes surrounding it. An important place is taken by its policy regarding public sector workers and that concerning transfer recipients, while the position and incomes of private sector workers and capital owners are central to its policy directed at the recovery of the market. I would, finally, like to refer to a, recently publicized, very important study by the Dutch Central Bureau of Statistics on the development of purchasing power in the Netherlands, in which the significance of the aforementioned social groups--and the mobility between them--is emphasized.³⁶ The interest functions for these groups will, in their most elementary form, only have as arguments the level of disposable income and the consumption level of government provided goods for the representative individual. However, since it could be concluded that, for a number of reasons, individuals care for (pay heed to) the interests of other people, these functions will in reality have a more complex character, as earlier indicated.

10. Among the complex interest functions for the social groups referred to, the one for government sector workers is of particular importance as it underlies *government policy* and reflects the general interest that is in reality effective for the government. Government policy is for simplicity restricted here to the determination and provision of the total amount of government provided goods, and the distribution of the costs over the four groups distinguished. I hope it will be clear to the reader, by this time, that following my approach said function is a weighted representation of the interest functions perceived by government sector workers for the positions to which they refer (here maximally four), including their own position.

Assuming that the latter will try to realize their interests--among which the vested interests due to pressure--as best they can, government behavior can now be determined if further is known what "impersonal" restrictions (structural coercion) the government is facing. Particularly important here is the question which economic model can be considered as representative for the way decision-makers take account of the nature of the economic process and of the impact of government behavior on this process.

This concludes, in fact, the rough sketch I wanted to present of my approach of government behavior, which I have labeled the *interest function approach*, for convenience.³⁷ Before offering an impression of what can be done with this approach, I will first go somewhat deeper into some aspects concerning the complex interest function for the government.

11. In the first place, it is perhaps desirable to indicate once more the nature of this function. According to my reasoning it represents the general interest as it is effective with the decision-makers within the government organization. In

principle, an operational definition is obtained herewith of a concept that was said to be meaningless if merely employed as such. This operationalization concerns the *factual* behavior of the government. It goes without saying, however, that it is free to anyone to define a function that gives a normative content to the concept, indicating to what extent the government *should* further interests on moral grounds. One speaks of a "social welfare function" in that case, which is usually conceived of as a fair compromise between the underlying utility function of all individuals.³⁸ As was noticed before, it is common in the literature to approach government behavior in this, normative, way. In the theoretical debate pertaining to the nature of such a welfare function, Harsanyi has argued that social welfare is represented by the unweighted average of the utility functions of all individuals.³⁹ To support his assertion, he, *inter alia*, argues that every rational individual would endorse such a specification if it were absolutely uncertain with respect to its position in society (or imagines same by way of thought experiment) and, consequently, attaches, for all social positions, the same subjective probability to the possibility of arriving at a particular position. For, in that case only the individual could rightfully be called impartial, which is required for a moral judgement.

Since mobility is one of the determinants of the complex interest function for the government, it cannot be excluded, theoretically at least, that this function is of the same nature as the aforementioned social welfare function. For practical purposes, it is of greater significance, though, that if empirical content can be given to the interest function for the government (see below), this function can be compared with a social welfare function such as derived by Harsanyi, for example. In this way information can be obtained on the extent and the nature of the partiality of government policy.⁴⁰

But there is more. As a behavioral model underlies the interest function, new instruments are suggested by which the effectiveness of *advices* aiming at policy changes can be improved. Perhaps it can then be avoided more often that policy proposals cross the government organization like uncontrolled missiles, as a high government official in the Netherlands once remarked.⁴¹ It can be questioned, for example, whether to direct one's policy advices to the government itself is under all circumstances the most sensible thing to do. Perhaps the reader allows me--on the risk of becoming a bore--to remind her or him of the possible reasons why individuals, and, thus, also government sector workers, will pay attention to the interests of others. These were: innate altruism or jealousy, multiple positions, mobility, pressure and structural coercion. Suppose now that government sector workers are such selfish people that they will only take account of the interests of other social groups if they are exposed to continuous pressure, accumulating to vested interests, or for merely instrumental reasons (structural coercion). In that case, it does not make much sense, of course, to a policy advisor who, for whatever reasons, would like to see the interests of transfer recipients better promoted by the government, to direct her or his advices to this government. They will not have any effect. The aspired goal might be achieved, however, by supplying *new* information to the transfer recipients themselves, or to those sharing or serving their interests, on the way(s) in which the pressure in favor of the transfer recipients could be enhanced in order to get their interests better vested with the government (given the existing state of altruism and jealousy, mobility, multiple positions and structural coercion). As it is likely that in reality only a few egoists of the indicated type can be found in the government organization, including the government among the advised will be a sensible thing to do. Disregarding innate altruism--a motive of which I said I personally do not expect that much--most

people will serve the interests of transfer recipients to a greater or lesser extent under the influence of internalized general norms concerning the care for other people, but in particular also, I think, because of the probability to find oneself in a dependent's position (mobility), or because of the fact that one already receives transfers (multiple positions). The example given here refers to the group of the "dependents," but could obviously also have involved the capital owners or the private sector workers, that were distinguished as important social groups in the private sector.

12. The second aspect connected with the complex interest function that I would like to go into somewhat further, is the empirical significance of *multiple positions* and *mobility*. Apart from innate altruism, multiple positions and mobility are the only reasons why government sector workers "voluntarily" serve the interests of social groups in the private sector. In their absence, the latter have to fall back on the--costly--instrument of pressure to get their interests vested. In this context we should not only think of the actions of interest groups in the more traditional sense, but also of the interest promotion through political parties and elections. It is an interesting question, therefore, to what extent mobility and multiple positions actually occur among government sector workers.

There are only a very few studies in this area at hand for the Netherlands, the country to which I will restrict my attention. From a ranking published by Corpeleijn in 1980 of mobility figures for 44 industry groups (concerning the percentage of employees that had voluntarily chosen another employer in 1977 in comparison with 1976) it appears that "public administration, defense and social insurance" took a low 39th place (with a percentage of 2.8), while "education" ranked 30th (4.1), and "public utilities" 43rd (0.7); the average percentage was 5.6.⁴²

Moreover, averaged over all industry groups mobility occurred in 40 percent of the cases within the same industry group. As an indicator of job security, Corpeleijn used the percentage of layoffs. For the aforementioned industry group these percentages were, respectively, 1.3, 1.8, and 0.9, while the average over all groups amounted to 3.3 percent.

As regards the mobility of politicians, there is a study by Van Schendelen and Van der Paardt concerning the occupational mobility of members of the Second Chamber during the period 1970-1974.⁴³ In this period 122 members, out of a total of 150, left the Parliament, what amounts to 25 per year, a number that appears to correspond with the average on a yearly basis for the Sixties. It further shows up, that after elections approximately one-third of the old members do not come back. From the 122 members that left the Chamber, 53 percent choose an occupation in the government sector (including education), 18 percent retired, 12 percent went to a political party or a social organization, 13 percent choose a business occupation (including self-employment). Less than 30 percent (and little more when excluding the retired), consequently, oriented itself on an occupation in the private sector, the sector which absorbs circa 80 percent of the total labor force. The percentage that opts for an occupation in the public sector approximately appears to equal the percentage that comes from this sector at the start of their job in Parliament.⁴⁴ An important role in this respect is undoubtedly played by the fact that in the Netherlands (due to a law called the "Non-activiteitwet" from 1923), but also in other countries, politicians coming from the government sector enjoy some special facilities, such as the right to come back, as well as special allowances to bridge any difference between their earnings as a bureaucrat and as a member of Parliament.⁴⁵ Financial obstacles are scarcely present, therefore, for this category of politicians, while the political risk of resignation is almost

completely covered. According to Elzinga circa half of the members of the Second Chamber would have profited from this in the years 1976, 1980 and 1984.⁴⁶

Also with respect to the occurrence of multiple positions among government sector workers only very limited information is available. There is a study by Helmers *et al.* on "double functions" linking firms and government agencies, which aroused a lot of publicity at the time.⁴⁷ Attention is in that study restricted, however, to the "directeuren" and "commissarissen" (chief executive officers and directors) of 86 large firms, among which public firms and participations, while, for example, no distinction is made between directorships of bureaucrats for which they personally receive a remuneration, and those which they hold on behalf of the government. The research results suggest that such positions do not occur among top-level bureaucrats, but on the level of the (semi-) governmental institutions that are involved in counseling or in the execution of government policies; institutions that are sometimes denoted as the "fifth power." Their role is apparent in institutions like the "Sociaal Economische Raad" (Social Economic Council) and in those in the social insurance area, where the representation of the business sector (employers and employees) is legally regulated. It also comes out that not all governmental agencies are that favorite. Especially "Economic Affairs," "Finance" (through the governmental financial institutions), and "Education and Science" appear to be attractive departments.

As concerns the Second Chamber, research by Van den Berg shows that, while until the latter half of the Fifties 70-80 percent of its members continued their occupation, in 1979 88 percent said to have given it up, when asked in a survey.⁴⁸ Also with respect to paid side-functions the impression is that their number has considerably decreased, partly due to the improved earnings of the members. Elzinga mentions a number of 53 for the year 1982.⁴⁹

Summarizing, I come to the tentative conclusion that mobility among government sector workers in the Netherlands is in general relatively low,⁵⁰ while the not so surprisingly greater mobility among members of Parliament is characterized by a strongly dominating orientation on the government sector and a very weak orientation on occupations in the private sector. Multiple positions seem to play a much more important role in so far as the direct furtherance of the private sector's interests are concerned, but this role does not seem to extend to the top-level of the bureaucracy, and seems further to be strongly fluctuating in number for the different subsectors of the government as well as for the different social groups. In particular the absence of the "dependents" (transfer recipients) catches the eye. To give an idea of the size of this group, I notice that in 1980 those outside the labor force with a transfer income made up 39 percent of all income recipients.⁵¹

13. The reference to subsectors of the government brings me to the third, and final, aspect of the complex interest function for the government that I shortly want to highlight. Up until now I have addressed the group of government sector workers--who together make up the government--on a macro-level. The government is an *organization*, however, within which, by more detailed micro-observation, again different positions can be distinguished. In that respect the government is not different from any organization in the private sector. The single essential difference is that the government successfully claims the monopoly of legitimate physical force within a certain geographical area. The military and the police enable it to force its policy upon dissidents or to coerce people to behave in a particular way, albeit that even here restrictions occur. For, was it not Talleyrand

who once noticed that you can do anything with bayonets except for sitting on them?⁵²

As in other organizations the behavior of the government is determined by the interactions between the individuals that make up the organization. Because of the aforementioned monopoly that the government has at its disposal and the action space that it creates, a more detailed knowledge of this organization is much desired. Notwithstanding the huge literature on organizations, it is probably fair to say that the theoretical modeling of the way organizations internally function is still in its infancy. Organizations, like firms or the government, are in economic theory typically treated as a *black box*, as I have in fact done so far.⁵³ It is not my intention to develop such a theory here. I only want to draw some lines along which it might be developed. Since we have again to do with the behavior of individuals in different positions, the same behavioral determinants should be expected to play a role as were distinguished when I discussed individual behavior in general. Also this time account should be taken of the impact of multiple positions, mobility, pressure, and structural coercion. Multiple positions seem to play a less important role here. Moreover, it is worth noticing that mobility will almost exclusively be upward, so that in this respect only the interests of superiors will be referred to.

According to the traditional Weberian vision on the governmental organization as a bureaucracy, the arrow should be pointing in exactly the opposite direction for pressure. Superiors in the organization are supposed to put pressure on subordinates, but not the other way around. Dependent on the significance of the position for the extent to which others in the organization are able to realize their interests, the exerted pressure will crystallize into a vested interest with these others. The factual, *informal* organization, may therefore look considerably

different from the *formal* organization as described by the official blueprint. Even the *boundaries* of the organization become obscure by it. To give an example, if an organization--a firm, for instance--belongs to the private sector according to some formal criterion, it may nevertheless factually be subsumed under the government sector if its behavior is largely determined by the government, under the pressure of the latter. It is unimportant thereby whether the dependence is the result of financial support or is established otherwise, such as by regulation. Any definition of the government or public sector will therefore be rather arbitrary in practice.⁵⁴

I return to the different positions that can be distinguished within the government organization. In line with the approach that I introduced above, interest functions can again be formulated, albeit now for representative individuals in the positions just referred to. However, since these are positions within the group of government sector workers, the interests that play a role here are of a more *particularized* nature. In case of some particular department, for example, only the disposable income level and the availability of government provided goods for bureaucrats within that department will figure as arguments in this function in its most elementary form. To sketch my approach of the internal functioning of the government organization I restrict myself, for simplicity, to the following two hierarchical levels: the top level of Cabinet and Parliament, made up by the politicians, and the executive (departmental) level of the bureaucrats. On the top level the official (formal) decision-making takes place regarding, on the one hand, the distribution of national income over private and public sector, and, on the other hand, the allocation of the means obtained by the latter over the different departments. If we now consider the position of a politician on this level, and neglect, for simplicity, the possible influence of altruism (or jealousy), multiple positions, and mobility, then the complex interest function for a "representative

politician" will be determined by: (a) the particularized interests of the politicians as government sector workers; (b) the interests of the different social groups (among which, again, the government sector workers) in so far as these have been vested with the politicians through the pressure of voters, political parties, and (other) pressure groups; and, finally, (c) the particularized interests of the bureaucrats of the different departments, again in so far as these have been able to vest their interests with the politicians by using pressure. What the representative politician looks like--and, thus, the complex interest function underlying the government budget and its distribution over the departments--is determined by a bargaining process among the politicians. Using game-theoretical arguments, this process can again be described in such a way that the said function can be represented as a weighted average of the different interests involved. Elsewhere, I have shown in greater detail how these things can be formalized along the indicated lines.⁵⁵

14. I shall now first resume the most important characteristics of the interest function approach of government behavior, and then shortly go into some applications.

Central to the approach is the attempt to contribute to the development of a theory of factual government behavior.

A *second* characteristic is, that it is explicitly attempted to base such a theory on a general theory of individual behavior. Of assumptions with respect to the interests or preferences of individuals it is demanded--irrespective of whether these individuals are in the public sector or in the private sector--that they are consistent with plausible assumptions regarding the motivations of individuals. Thus, it is not *a priori* taken for granted that the motives of people in the one sector are different from those in the other.⁵⁶

A *third* characteristic is, that it is tried to take explicitly account of institutional aspects. For research strategic reasons, the structure of the production process in a market economy is thereby taken as point of departure for a distinction between four elementary positions, to wit: government sector worker, private sector worker, capital owner, and "dependent." These positions not only determine how interests manifest themselves, but are also important for the way in which these interest can be furthered. Whenever the available research tools permit such, more refined group divisions may of course be desired when studying particular problems. Differences in education or race, but also between geographical regions or industries may require so.

The *last* characteristic of the approach that I want to mention here is a preference for formalization, in the sense of mathematical modeling. The reason is the complexity of the research area, where the thrust of an argument quite often depends on the exact specification of the assumed relationships between the variables used, as well as the desire to clear the way for experimental and empirical research. In this way more opportunities become available to judge the plausibility of theories. For the social sciences research industry this is of great importance if we do not want to get stuck in a "talk-science."⁵⁷ I hurry to add that the use of mathematics is as such no guarantee for its avoidance; after all mathematics also is a language. Applications are important, therefore.

15. Using the approach sketched above, a number of theoretical and empirical studies have been carried out.⁵⁸ As regards the theoretical research, the emphasis so far has been on the study of the question of how the government would behave according to this approach and what the consequences subsequently would be for the development of the overall economic process, of which government behavior

only forms a part. The existing general (macro-) economic models are not fit for the latter, as the government is essentially taken outside the economic process (i.e., treated as exogenous), causing them to be misspecified for doing that job; to put it strongly, they give no insight into the factual development of the total economy.⁵⁹

Among other things, the influence of politics on the rise and development of short term as well as long term *economic fluctuations* has been studied. The extent to which the different social groups get their interests promoted by the government--or, put differently, the nature of the complex interest function of the government--appears to have an independent effect. By using a model of voting behavior this effect could be determined for an economy within a democratic political setting, marked by regular elections, as well as for an economy without elections.⁶⁰

Since the weights people attach to their disposable income and the availability of government provided goods, as well as the political influence structure in an economy--also within the government organization--normally, only gradually change, it is not surprising that it is found, in line with everyday experience, that governmental policy changes are mostly of an *incremental*, or *decremental*, nature. Only shocks, such as due to a war or--under certain circumstances--because of changes in government, can violate this pattern.⁶¹

If it may be assumed that in actual decision-making within the government organization only rather simple notions (models) of the economic process are employed, where attention is particularly focused on more or less direct, "first-order," effects--and in view of the pluriformity of the visions offered by economists alone, this need not surprise us--our research results further show, for example, that the empirically often observed *pro-cyclical behavior* of the government can be given a behavior-theoretic explanation.⁶²

Such results fly in the face of the image of the government that citizens are presented in numerous publications by politicians that try to legitimate their policies, but also by economists. Even though almost everyone seems to speak nowadays of the uncontrollability of public expenditure and the restricted grip of the government on the economic process, this does not do away with the fact that across the whole party-political spectrum it is strongly suggested that, neglecting technical management problems and a possibly wrong choice of politicians, the government is there to effectuate an efficient allocation, a just income distribution, and a stabilization of the economy on a full-employment level. The probably most widely used introductory textbook on public finance, that of Musgrave and Musgrave, speaks in this context of the three *goals* or functions of fiscal policy.⁶³ It will be clear from the foregoing that in my view such goals should not be assumed, but derived from a behavioral model concerning the actual functioning of the government.⁶⁴

I shall give another example in this context. Since the start of the Sixties the Netherlands have witnessed a so-called *structural budget policy*. Roughly put, the policy demands that the budget deficit of the government develops in such a way that on a structural basis an equilibrium between means and expenditure is maintained in the economy at a full-capacity level.⁶⁵

Officially this structural norm for fiscal policy has been applied from 1961 until 1979. Under the pressure of the bad financial position of the government attention then shifted to the factual deficit.

But, according to Koopmans and Wellink the dismantling of the policy already started at the beginning of the Seventies.⁶⁶ The question can be raised, however, whether this type of policy, that in essence requires that the government adjusts itself to the development in the private sector, has really been applied at all. In a

recent study that I carried out with Van Velthoven it is shown that also in a non-normative way, that is by using the interest function approach of government behavior, the budget deficits that were obtained in these years can be explained, using rather plausible assumptions.⁶⁷

In view also of the historical analysis by Stevers of budget norms in the Netherlands, I am willing to defend the thesis that the structural budget norm has actually been used more as an instrument of rationalization than as a behavioral goal.⁶⁸

Another application of the interest function approach concerns the explanation of the development of the *tax rate*. The results obtained here by the same model for the Netherlands as well as the United States are encouraging.⁶⁹ In this model, pressure (political influence) and mobility (namely, the probability to become unemployed) play an explicit role. The results, at the very least, do not seem to contradict the significance imputed to these factors nor the finding, that is also obtained by other researchers, that the political color of the government does not produce the expected effect.⁷⁰ They suggest, furthermore, given the validity of the model, that the extent to which government sector workers, private sector workers, and capital owners (in these studies, because of data limitations, represented by the self-employed) succeed in influencing the political decision-making process can be approximated by the relative numerical strength of these social groups. The tax rate increases, for example, if the relative number of the self-employed in the labor force decreases. The same happens if the probability of unemployment rises. "Dependents" (that is, those dependent on transfer income) are thereby--with an eye on reality--assumed to have no direct political influence.⁷¹ Some suggestive empirical results pertaining to this assumption has, in the meantime, been presented in a study that focuses on social security.⁷²

The research that has been undertaken so far--the explorative character of which demands that one should be careful when using its results--suggests that the following factors have played an important part in the growth of the public sector: the development of the numerical strength of the social groups that are actively involved in the production process, the probability of becoming a member of the group of "dependents," and economic growth.

Although these are all first, tentative results, they nevertheless show that the proposed approach does not only lead to interesting theoretical implications, but that it can also be used for the empirical study of government behavior and its impact on the economy.

In developing the approach I hope to have sufficiently headed the advice given by Schumpeter in the study that I referred to in the beginning, which reads: *"One should really never say 'the state does this or that.' It is always important to recognize who or whose interest it is that sets the machine of the state in motion and speaks through it."*⁷³ This evokes the question of who that man in the public sector actually is, a question to which I have tried to formulate the beginning of an answer.

FOOTNOTES

1. B. de Spinoza, *Tractatus Politicus*, in: A. G. Wernham, *Benedict de Spinoza: The Political Works* (Oxford: Oxford University Press, 1958), p. 262. According to Schumpeter every economist should be able to quote these lines on her or his deathbed; see J. A. Schumpeter, *History of Economic Analysis* (London: Allen and Unwin, 1972), pp. 126-127. The english translation presented in the History is unfortunately not correct; the words "sedulo curavi" concern the ensuing text (that is omitted in the History, however) and do not refer to the foregoing. The translation given by Wernham reads: "in order to investigate the topics pertaining to this branch of knowledge with the same objectivity as we generally show in mathematical inquiries, I have taken great care to understand human actions, and not to deride, deplore, or denounce them" (Wernham, *op. cit.*, p. 263).
2. J. A. Schumpeter, "The Crisis of the Tax State," in: A. T. Peacock *et al.* (eds.), *International Economic Papers: Translations Prepared for the International Economic Association* (New York: MacMillan, 1954), p. 7. Originally published as: *Die Krise des Steuerstaats*, Zeitfragen aus dem Gebiete der Soziologie, Graz/Leipzig, 1918. The translation is by W. F. Stolper and R. A. Musgrave.
3. D. C. North, "Structure and Performance: The Task of Economic History," *Journal of Economic Literature*, 16, 1978, p. 969.
4. OECD, *Public Expenditure Trends*, Paris, 1978.

5. C. Goedhart, "Honderd jaar openbare financiën," *De Economist*, 1952, pp. 958-995.
6. P. A. Samuelson, "The Pure Theory of Public Expenditure," *Review of Economics and Statistics*, 36, 1954, pp. 387-389; by the same author: "Diagrammatic Exposition of a Theory of Public Expenditure," *Review of Economics and Statistics*, 37, 1955, pp. 350-356.
7. See: J. Tinbergen, *On the Theory of Economic Policy* (Amsterdam: North-Holland, 1952), and, further, his: *Economic Policy: Principles and Design* (Amsterdam: North-Holland, 1961); H. Theil, *Economic Forecasts and Policy* (Amsterdam: North-Holland, 1961), and, by the same author: *Optimal Decision Rules for Government and Industry* (Amsterdam: North-Holland, 1964).
8. B. de Spinoza, *op. cit.*, pp. 260-261. It is important to note that the word "should" in this context is used here, and in the sequel, in the instrumental ("teleological") sense. I do not want to assert by it that the study of government-including welfare economics for that matter--as commonly practiced, is non-neutral in character (pertaining to this, see P. Hennipman, "Welfare Economics in an Impasse? Some Observations on Mishan's Vision," *De Economist*, 130, 1982, pp. 457-464, and the ensuing discussion between Hennipman and E. J. Mishan in the same journal, Vol. 132, 1982, pp. 75-85, 86-99, 234-238).
9. As regards the former, see, for example, B. Jessop, "Recent Theories of the Capitalist State," *Cambridge Journal of Economics*, 1, 1977, pp. 353-373. The

- latter is extensively treated in D. C. Mueller, *Public Choice* (Cambridge: Cambridge University Press, 1976).
10. For a historical sketch of the development of this approach, see J. M. Buchanan, "Public Finance and Public Choice," *National Tax Journal*, 28, 1975, pp. 383-394.
 11. On an introductory level this is also shown by Hans van den Doel, *Democracy and Welfare Economics*, (Cambridge: Cambridge University Press, 1979) (originally published in Dutch).
 12. R. W. Boadway and D. E. Wildasin, *Public Sector Economics*, 2nd edition (Boston: Little/Brown, 1984). R. A. Musgrave and P. B. Musgrave, *Public Finance in Theory and Practice* (New York: McGraw-Hill, 1984); with respect to the relevant Chapter 6 they, moreover, remark that "the more hidebound economics majors may skip this chapter."
 13. See P. S. A. Renaud and F. A. A. M. van Winden, "Tax Rate and Government Expenditure," working paper, University of Amsterdam, 1986 (revised version); F. A. A. M. van Winden, *On the Interaction Between State and Private Sector* (Amsterdam: North-Holland, 1983); F. A. A. M. van Winden, "Economie van het overheidsgedrag en de relatie tussen centrale en lagere overheid," *Bestuurswetenschappen*, 1983, pp. 407-422.
 14. M. Barry, *Sociologists, Economists and Democracy* (London: Collier-MacMillan, 1970), p. 3.
 15. For a discussion of the concepts that can be found in the literature, see P. Hennipman, "De verdeling in de paretiaanse welvaartstheorie," in: P. J.

- Eijgelshoven en L. J. van Gernerden (red.), *Inkomensverdeling en openbare financiën* (Utrecht: Het Spectrum, 1981), pp. 128-170. See further, e.g., D. L. Krebs, "Altruism--An Examination of the Concept and a Review of the Literature," *Psychological Bulletin*, 73, 1970, pp. 258-302; J. Hirschleifer, "The Expanding Domain of Economics," *American Economic Review*, 75, 1985, pp. 53-68.
16. In the literature this is sometimes referred to as the "insurance motive" (see Hennipman, *op. cit.*, p. 142).
 17. J. A. A. van Doorn and C. J. Lammers, *Moderne Sociologie* (Utrecht: Spectrum, 1967), p. 260.
 18. R. Dahrendorf, *Homo Sociologicus* (Koeln: Westdeutscher Verlag, 1968).
 19. A. Schotter, *The Economic Theory of Social Institutions* (Cambridge: Cambridge University Press, 1981); M. Taylor, *Anarchy and Cooperation* (London: Wiley, 1976); O. E. Williamson, *Markets and Hierarchies* (New York: The Free Press, 1975).
 20. G. S. Becker, "A Theory of Social Interactions," *Journal of Political Economy*, 82, 1974, p. 1080.
 21. D. R. Kiewiet, *Macroeconomics and Micropolitics, The Electoral Effects of Economic Issues* (Chicago: University of Chicago Press, 1983). D. R. Kinder and D. R. Kiewiet, "Economic Discontent and Political Behavior: The Role of Personal Grievances and Collective Economic Judgements in Congressional Voting," *American Journal of Political Science*, 23, 1979, pp. 495-527; M. S. Weatherford, "Economic Conditions and Electoral Outcomes: Class Differences

in the Political Response to Recession," *American Journal of Political Science*, 22, 1978, pp. 917-938.

22. D. Krech, R. S. Crutchfield, and E. L. Ballachey, *Individual in Society* (New York: McGraw-Hill, 1962), p. 404.
23. Natural selection mechanisms in a Darwinian sense may be the cause of this, according to some authors; see, e.g.: Krebs, *op. cit.*; H. Margolis, *Selfishness, Altruism and Rationality* (Cambridge: Cambridge University Press, 1982), in particular p. 26; E. Wilson, *Sociobiology* (Cambridge, Mass.: Harvard University Press, 1975). Krebs concludes: "Although the existence of genetic or biochemical determinants of altruism is a fascinating possibility, it must remain only that until further evidence appears." (*op. cit.*, p. 262). The debate regarding the effects of genetic endowments on socioeconomic success suggests that such evidence will not be easy to establish; see P. Taubman (ed.), *Kinometrics: Determinants of Socioeconomic Success within and between Families* (Amsterdam: North-Holland, 1977).
24. See, e.g., Hennipman, *op. cit.*
25. See, e.g., M. Rothschild and J. Stiglitz, "Equilibrium in Competitive Insurance Markets," *Quarterly Journal of Economics*, 90, 1976, pp. 629-650.
26. As regards the method of revealed preference, this has recently clearly been exposed once more by Kapteyn. That is, in so far as it is tried to derive these preferences from non-verbal behavior, such as the buying behavior of consumers. In his view, utility can be measured directly, without using observations with respect to factual behavior, by asking people for their

valuations, in particular--following up the research initiated by B. M. S. van Praag--their evaluation of income. The nature of the results obtained so far with this approach clearly show the importance of this research method. Nevertheless, to my opinion it cannot be claimed here that utility is measured directly; again, the results are an amalgam of preferences and behavioral constraints. Verbal behavior is as much behavior as is non-verbal behavior. Although different behavioral restrictions may be relevant, one should nonetheless allow for their existence. Opinions are influenced, for example, by cultural norms, or by the effects that they are expected to have ("strategic behavior"), or by the way in which--or the simple fact that--an answer is to be given. Psychologists and sociologists have pointed out the mutual dependence of the valuation that individuals have of an object--such as income here--and their preparedness for action in that respect (their "attitude" concept covers both of these aspects). Consequently, if the latter changes under the impact of behavioral constraints, the former may change as well. See A. Kapteyn, "Utility and Economics," *De Economist*, 133, 1985, pp. 1-20.

27. The variability of preferences is central to the income evaluation studies of Van Praag and Kapteyn (see Kapteyn, *op. cit.*, and, for example, B. M. S. van Praag, *Kijken achter de spiegel: beeld en werkelijkheid* (Leiden: Stenfert Kroese, 1984), or, by the same author, "Linking Economics with Psychology: An Economist's View," *Journal of Economic Psychology*, 6, 1985, pp. 289-311. According to Kapteyn's preference formation theory an individual will give its income a valuation, on a (0,1)-scale, equal to the value of the perceived income distribution function at the individual's income level. As I see it, there are three problems with this theory that is highly attractive because of its

simplicity and intuitively plausible character. For one thing, the perceived income distribution need not per se correspond with the distribution within the individual's reference group, while only the latter counts (also to the opinion of Kapteyn, if I understand him correctly). If I am right, then the problem arises that it is not indicated what the determinants of a reference group are, which leaves it unclear how the theory could be tested. The determinants that I mentioned in my exposition might be of help here. Furthermore, the theory seems plausible to me in so far as the affluence of individuals is concerned. I doubt, however, its significance for the measuring of utility in the sense of "happiness," "satisfaction," "pleasure," "welfare" or "well-being" (Kapteyn, *op. cit.*, p. 1). Let me give an example. A rich individual in a community with poor people who succeed by exerting pressure (effective threats) to get their interests vested with the individual, and thereby to participate in its reference group, will most probably call its income in an interview "good" or "excellent"--in view of the individual's position in the income distribution of its reference group--but for the very same reason feel rather unhappy. The questioning does not touch upon, or activate, this feeling. The individual would have to badly rate its relatively high income. It would presumably consider such an answer as "abnormal," and would, therefore, refrain from giving it.

28. Van Winden, *On the Interaction . . .*, in particular Ch. 7.

29. See, e.g., Ch. R. Plott, "Industrial Organization Theory and Experimental Economics," *Journal of Economic Literature*, 20, 1982, pp. 1485-1527; and, by the same author, "Rational Choice in Experimental Markets," *Journal of Business*, forthcoming.

30. N. E. Algra and H. C. J. G. Janssen, *Rechtsingang* (Groningen, 1982), p. 295.

31. *Op. cit.*, p. 295.

32. K. J. Arrow, *Social Choice and Individual Values* (New Haven: Yale University Press, 1963). It may be mentioned here that the well-known Pareto criterion in economic theory can be regarded as such as an unambiguous operationalization of the general interest concept, albeit of limited use as distributional questions cannot be tackled with it in general.

33. "the phrase 'public interest,' like other pleasant generalities, means different things to different men," according to L. Eisenstein in: *The Ideologies of Taxation* (New York: The Ronald Press, 1961), p. 200.

34. M. Weber, *Wirtschaft und Gesellschaft* (Tuebingen: Mohr, 1972), p. 29.

35. See Van Winden, *On the Interaction . . .*, p. 91. This study, *inter alia*, also deals with elections.

36. H. van de Stadt, *et al.*, "Koopkrachtontwikkelingen 1977-1983," *Economisch Statistische Berichten*, 70, 1985, pp. 288-296.

37. The interest function approach differs from the Marxist approach, among other things, by the more prominent place that is assigned to individuals instead of impersonal structures (after all individuals are the ultimate carriers of social relationships). In addition, the traditional Marxist distinction between only two main social classes is broken with, while, further, the desirability of formalization is emphasized. As regards the public choice approach the differences are, *inter alia*, that: the rigid methodological individualism of this

approach is relaxed by the introduction of social groups (classes) and power structures; other forms of structural coercion and pressure are incorporated in the analysis than those that have to do with elections; the bureaucracy is modeled as an endogenous part of the government organization; and, more emphasis is placed upon the structure of the private sector.

38. J. Harsanyi, *Essays on Ethics, Social Behavior and Scientific Explanation* (Dordrecht: Reidel, 1976), p. 13. Instead of introducing the new label of a (complex) interest function I could have employed the term social welfare function in the sense of Bergson (see A. Burk, "A Reformulation of Certain Aspects of Welfare Economics," *Quarterly Journal of Economics*, 1938, pp. 310-334). However, since usually reference is made (implicitly) to a "just" or "fair" compromise, while, moreover, Bergson refers to the "welfare of the community" whereas in my approach it is, basically the welfare of a subgroup of the community (namely that of government sector workers) that is referred to, I thought it better not to use it, in order to avoid a possible confusion. Besides, the terminology chosen nicely fits in with common parlance in this area (interests, interest groups, vested interests).
39. Harsanyi, *op. cit.*, pp. 12-14 and 65-67.
40. An empirical illustration is presented in B. C. J. van Velthoven, F. A. A. M. van Winden, and P. S. A. Renaud, "Belastingdruk en overheidsbestedingen in Nederland, 1952-1977," *Economisch Statistische Berichten*, 69, 1984, p. 869.
41. Mr. A. Staatsen (at the time director general at the ministry of home affairs), in: *Binnenlands Bestuur*, 27 Jan. 1984, p. 10.

42. A. W. F. Corpeleijn, "Arbeidsmobiliteit en werkgelegenheidsstructuur," *Economisch Statistische Berichten*, 65, 1980, pp. 88-92.
43. M. P. C. M. van Schendelen and R. N. G. van der Paardt, "De Tweede Kamer als carrièrekanaal," *Beleid en Maatschappij*, 1975, pp. 50-58.
44. C. B. S., *Statistiek der verkiezingen 1977* ('s-Gravenhage: Staatsuitgeverij); see also J. Th. J. van den Berg, "Herkomst, ervaring en toekomstperspectief van kamerleden," in M. P. C. M. van Schendelen, J. J. A. Thomassen and H. Daudt, "Leden van de Staten-Generaal" ('s-Gravenhage: Vuga, 1981), p. 42.
45. D. J. Elzinga, *De financiële positie van de leden der Staten-Generaal* (Wolters-Noordhoff, 1985), p. 189, e.v.
46. Elzinga, *op. cit.*, p. 227.
47. H. M. Helmers, *et al.*, *Graven naar macht* (Amsterdam: Van Gennep, 1975).
48. Van den Berg, *op. cit.*, p. 44; by the same author: *De toegang tot het Binnenhof* (Weesp: Van Holkema en Warendorf, 1983), p. 182, e.v. From the first mentioned source it appears, furthermore, that 76 percent of the First-Chamber members said to have maintained its occupation. In view of where they came from, 56 percent of these members would have maintained an occupation in the government sector (including education), and 29 percent in the business sector.
49. Elzinga, *op. cit.*, p. 91.
50. For an interesting attempt to explain differences in mobility among government sector workers, see G. J. Borjas, "Labor Turnover in the U. S. Federal Bureaucracy," *Journal of Public Economics*, 19, 1982, pp. 187-202.

51. SER-advies inzake het sociaal-economisch beleid op middellange termijn, 1981, p. 33.
52. S. Stuurman, *Kapitalisme en burgerlijke staat* (Amsterdam: SUA, 1978), p. 156.
53. Cf. H. Leibenstein, "A Branch of Economics is Missing: Micro-Micro Theory," *Journal of Economic Literature*, 17, 1979, pp. 477-502.
54. The definition of Goedhart that the collective sector is the set of provision sectors where taxation is used as a means of finance, is in my view too restrictive, therefore; see C. Goedhart, *Hoofdpijnen van de leer der openbare financiën* (Leiden: Stenfert Kroese, 1975), p. 2. Compare also V. Halberstadt, *Naar een economische theorie van de publieke sector* (Leiden: Universitaire Pers, 1976), p. 8, and B. C. J. van Velthoven and F. A. A. M. van Winden, "Privatisering, een politiek-economische benadering," *Openbare Uitgaven*, 16, 1984, pp. 304-305.
55. Van Winden, *On the Interaction . . .*, in particular Chs. 4 and 7; see also my "A Two-Sector, Two-Department Model of the Interaction between State and Private Sector," Centre for Research in Public Economics, Leyden University, Report 79.19, 1979. In this context I further refer to the "federalistic" model developed in P. S. A. Renaud and F. A. A. M. van Winden, "Decentralized Fiscal Allocation: A Study of the Interaction between Local and Central Government Behaviour," University of Amsterdam, 1986.
56. Cf. Goedhart, *op. cit.*, p. 7. Of course, this does not exclude that by a process

- of self-selection through the labor market individuals in this sector show on average different characteristics. One could think, for example, of a different taste for job security. Theoretically it is also possible, therefore, that individuals in the public sector are more altruistic. Perhaps, research using psychological test reports from both sectors may bring more clarity here.
57. See J. J. Klant, *The Rules of the Game* (Cambridge: Cambridge University Press, 1984), p. 185 (originally published in Dutch).
 58. For an introduction, see F. A. A. M. van Winden and B. C. J. van Velthoven, "Een eenvoudig politiek-economisch model," *Economisch Statistische Berichten*, 67, 1982, pp. 1196-1206, and Van Velthoven, Van Winden and Renaud, "Belastingdruk en overheidsbestedingen . . .," or B. C. J. van Velthoven and F. A. A. M. van Winden, "Social Classes and State Behaviour," *Zeitschrift für die gesamte Staatswissenschaft (Journal of Institutional and Theoretical Economics)*, 1986, forthcoming.
 59. They can be useful, though, for the policy preparation of the government, as they (hopefully) describe the functioning of the private sector, *given* the behavior of the government.
 60. See van Winden, *On the Interaction . . .*
 61. See B. C. J. van Velthoven and F. A. A. M. van Winden, "Towards a Politico-Economic Theory of Social Security," *European Economic Review*, 27, 1985, pp. 263-289.
 62. See B. C. J. van Velthoven and F. A. A. M. van Winden, "A Behavioural Model of Government Budget Deficits," working paper, 1986 (revised version).

63. Musgrave and Musgrave, *op. cit.*, p. 6.
64. Dutch reading social-democrats are, in this context, referred to P. Kalma, *De illusie van de "democratische staat"* (Deventer: Kluwer, 1982), i.h.b., pp. 43, 80, 81.
65. See: H. Burger, "Structural Budget Policy in the Netherlands," *De Economist*, 123, 1975, pp. 329-351; C. G. M. Sterks, "The Structural Budget Deficit as an Instrument of Fiscal Policy," *De Economist*, 132, 1984, pp. 183-203.
66. See, e.g., L. Koopmans and A. Wellink, *Overheidsfinanciën*.
67. Van Velthoven and Van Winden, "A Behavioural Model . . ."
68. See Th. A. Stevers, "Begrotingsnormering 1814-1939," *Economisch en Sociaal-Historisch Jaarboek*, 1976, i.h.b., pp. 142, 146. A nice example of what Dutch political rhetoric can do to legitimate government policy is given by H. Kamps, "Afstel-Herstel," *Economisch Statistische Berichten*, 70, 1985, p. 285. See also Eisenstein, *op. cit.*, in this context.
69. B. C. J. van Velthoven and F. A. A. M. van Winden, "Social Classes and State Behaviour: An Illustrative Application to the U. S. Economy of the Interest Function Approach to Politico-Economic Modelling," *Economics Letters*, 16, 1984, pp. 113-118; Renaud and Van Winden, "Tax Rate . . ."; P. S. A. Renaud, B. C. J. van Velthoven, and F. A. A. M. van Winden, "A Politico-Economic Analysis of the Great Depression," working paper, University of Amsterdam, 1985.

70. See, e.g.: J. P. Dunne, *et al.*, "Needs, Costs and Bureaucracy," Birkbeck College Discussion Paper No. 137, 1983; P. de Grauwe, "De politieke economie van de belastingdruk in België," *Tijdschrift voor Economie en Management*, 29, 1984, pp. 385-396; P. S. A. Renaud and F. A. A. M. van Winden, "On the Importance of Elections and Ideology for Government Policy in a Multi-Party System," in: M. J. Holler (ed.), *The Logic of Multi-Party Systems* (Wuerzburg: Physica Verlag, forthcoming).
71. Three determining factors for the production of vested interests are in our view (see Van Winden, *On the Interaction . . .*, Ch. 7): (1) the objective threat capacity of the agent that exerts pressure, determined by the extent to which the interests of the agent subject to pressure can be hurt; (2) the extent of group cohesion of the pressure group; (3) an information factor, determining the eventually perceived (effective) threat capacity (one has to show one's teeth from time to time). The "dependents" have a bad score on each of these points. As regards the first factor, the following (translated) passage from the organ of a Dutch industry union (Industriebond FNV) is interesting: To have work is to share the power in our society, however small this power per employed may be --he or she who has work is able to stop that work (*Zin*, 13, October 1982).
72. Van Velthoven and Van Winden, "Towards a Politico-Economic Theory . . ."
73. Schumpeter, "The Crisis of . . ."